

**Amendments to the Claims**

Please amend the claims to read as follows:

1. (Currently Amended) A ~~reusable~~ vacuum bag for forming a vacuum envelope over one or more polymeric materials being formed against a mold, comprising:

a) a fabric reinforced with flexible reinforcement fibers to withstand multiple mold cycles, the fabric having a flexible portion and a semi-rigid section; and

b) a chemically non-reactive and non-adhering material forming a release surface to separate said fabric from the polymeric ~~materials~~ material being formed against the mold.

2. (Currently Amended) The vacuum bag of claim 1 wherein the chemically non-reactive and non-adhering material forming said release surface ~~comprises:~~ comprises, a resin of: silicone, fluorocarbon, PPS, PEEK, polyketone, PEI, polyamide, ~~resin,~~ or a combination thereof.

3. (Currently Amended) The vacuum bag of claim 2 wherein said resin of fluorocarbon comprises: PTFE, FEP, ETFE, PFDV, ECTPF, PFA ~~resin,~~ or a combination thereof.

4. (Original) The vacuum bag of claim 1 wherein said fabric comprises fibers of aramid, glass, graphite, carbon, ~~fiber,~~ or a combination thereof.

5. (Original) The vacuum bag of claim 4 1 wherein said chemically non-reactive and non-adhering material ~~forming said release surface~~ further comprises, ~~a fiber,~~ fibers, a coating or a layer.

6. (Original) The vacuum bag of claim 1 wherein said fabric comprises a woven or nonwoven fabric.

7. (Original) The vacuum bag of claim 1, wherein said fabric comprises two fabric layers providing a double layer vacuum bag.

8. (Original) The vacuum bag of claim 1, wherein the chemically non-reactive and non-adhering material has a shape to distribute the flow of the polymeric materials material during formation thereof.

9. (Original) The vacuum bag of claim 1 wherein the chemically non-reactive and non-adhering material comprises a network of veins to distribute the flow of the polymeric materials material during formation thereof.

10. (Currently Amended) The vacuum bag of claim 1 wherein, ~~said network of veins comprises one or more protrusions on a molded part facing side of said vacuum bag~~ the chemically non-reactive and non-adhering material forming said release surface is bonded to both sides of said fabric layer.

11. (Currently Amended) The vacuum bag of claim 1 wherein ~~said fabric is a flexible layer~~ the flexible portion comprises relatively thin, or pliable, fabric material.

12. (Currently Amended) The vacuum bag of claim 1 wherein ~~said fabric is a semi-rigid layer~~ the semi-rigid section comprises relatively stiff, or relatively thick, fabric material.

13. (Currently Amended) The vacuum bag of claim 12 wherein said semi-rigid section ~~layer~~ has a three dimensional mold surface.

14. (Canceled).

15. (Original) The vacuum bag of claim 1 further comprising an integral flat flange along a perimeter of the vacuum bag.

16. (Currently Amended) The vacuum bag of claim 15 wherein said integral flat flange is configured to mate with a perimeter of the a mold.

17. (Original) The vacuum bag of claim 1 wherein said fabric comprises a translucent or transparent material for observance through said fabric and for passage of UV light through said fabric.

18. (Original) The vacuum bag of claim 1 wherein said fabric further comprises one or more resin feed channels.

19. (Original) The vacuum bag of claim 1, further comprising: one or more vacuum exhaust ports extending through the fabric.

Claims 20-27 are canceled.

28. (Currently Amended) The vacuum bag of claim 1, wherein said chemically non-reactive and non-adhering material comprises a tri-component fluorocarbon film heat-bonded to said fabric layer. ~~A reusable vacuum bag for forming polymeric materials against a mold, comprising:~~

~~a fabric reinforced with reinforcing fibers to withstand multiple mold cycles without significant leakage while under a vacuum of at least one bar;~~

~~a non-stick release layer extending over at least one side of said fabric; and~~

~~said fabric being formed with means for distributing the polymeric materials over a surface of said fabric.~~

29. (Currently Amended) The vacuum bag of claim 28, wherein said tri-component fluorocarbon film comprises a FEP-PTFE-FEP composite film. ~~A reusable vacuum bag for forming a polymeric material against a mold, comprising:~~

~~a fabric layer reinforced with flexible reinforcing fibers to withstand multiple mold cycles of a vacuum of less than ambient pressure without significant leakage;~~

~~said fabric layer having bonded thereto a release material forming a release surface to separate said fabric layer from the polymeric material formed against the mold, and~~

~~said fabric layer being transparent or translucent for observation through said vacuum bag.~~

30. (Currently Amended) A ~~reusable~~ vacuum bag comprising:

a fabric layer reinforced with high strength reinforcing fibers to withstand multiple mold cycles of a vacuum of less than ambient pressure without significant leakage; ~~and~~

~~at least one side~~ each side of said fabric layer having a corresponding non-stick fluorocarbon-based release layer bonded thereto; and

said vacuum bag forming a shaped cavity for shaping polymeric materials against a mold.

31. (Canceled)

32. (Currently Amended) The ~~reusable~~ vacuum bag of ~~claim 31~~, claim 30, wherein said ~~release layers comprise~~ each corresponding release layer comprises a tri-component fluorocarbon ~~films~~ film heat-bonded to respective major surfaces of said fabric layer.

33. (Currently Amended) The ~~reusable~~ vacuum bag of ~~claim 31~~, claim 32, wherein each ~~of said~~ tri-component fluorocarbon ~~films~~ film comprises a FEP-PTFE-FEP composite film. ~~having a thickness of less than 5 mil.~~

34. (Canceled).

35. (New) The vacuum bag of claim 30, further comprising: the fabric layer having a flexible ~~section~~ portion and a semi-rigid section.

36. (New) The vacuum bag of claim 35, wherein the flexible ~~section~~ portion comprises relatively thin, or pliable, fabric material.

37. (New) The vacuum bag of claim 35, wherein the semi-rigid section comprises relatively stiff, or relatively thick, fabric material.